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Mark Molitor

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PRICE HENEVELD COOPER DEWITT & LITTON, LLP  
695 KENMOOR, S.E.  
P O BOX 2567  
GRAND RAPIDS, MI 49501

EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/757,897  
Filing Date: January 15, 2004  
Appellant(s): MOLITOR, MARK

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 10/12/2009 appealing from the Office action mailed 8/4/2009.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

Claims 2-9,11-14,32, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by VanDenberg (5,718,445).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over VanDenberg in view of Mair (6,409,280).

1. The rejection of claim 17 under 35 U.S.C. 103(a) as being unpatentable over VanDenberg et al in view of Goby (2,823,927) has been withdrawn.

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2. The rejection of claims 18-20 and 29-35 under 35 U.S.C. 103(a) as being unpatentable over VanDenberg in view of Conover (6,832,772) has been withdrawn.

3. The rejection of claims 2,18-20,22-42 under 35 U.S.C. 103(a) as being unpatentable over Buhl (5,711,544) in view of VanDenberg (5,882,031) has been withdrawn.

### **(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

### **(8) Evidence Relied Upon**

Patent number 5,718,445 to VanDenberg

Patent number 6,409,280 to Mair

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

4. Claims 2-9,11-14,32, and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by VanDenberg (5,718,445). VanDenberg discloses a vehicle suspension assembly 1, comprising a first control arm 14 having a first end 35 and a second end, wherein the first end 35 of the first control arm 14 includes a first bushing 28 adapted to pivotally couple the first control arm 14 to a first frame member of a vehicle, and wherein the second end of the first control arm 14 is pivotally coupled to an axle 12 via linkage member 20 which extends upwardly from the axle 12, a second control arm 14 having a first end and a second end, wherein the first end of the second control arm includes a second bushing 28 adapted to pivotally couple the second control arm to a second frame member of a vehicle, and wherein the second end of the second control

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arm is adapted to be pivotally coupled to the axle 12 of the vehicle via linkage member 20, a rigid, tube-shaped first torsional member 31 coupled to the first control arm 14 rearward of the first bushing 28 and forward of the axle 12, and coupled to the second control rearward of the first bushing 28 and forward of the axle 12, a third control arm having a first end and a second end, wherein the first end of the third control arm is adapted to be pivotally coupled to a third frame member 7 of the vehicle, and wherein the second end of the third control arm is adapted to be pivotally coupled to the second frame member of the vehicle, a fourth control arm wherein the first end of the third control arm is adapted to be pivotally coupled to the third frame member 7 of the vehicle, and wherein the second end of the third control arm is adapted to be pivotally coupled to an axle 13, first and second pneumatic suspension bags positioned between the first and second frame members and axle 12, and third and fourth pneumatic suspension bags positioned between the first and second frame members, respectively, and axle 13, and a rigid second torsional member coupled to the third and fourth control arms. The torsional member 31 is situated such that it is proximate the first end 35 of the first control arm 14. The first and second ends of the first, second, and third control arms 14 include elastically deformable bushings 28 which have elongated apertures extending through the center.

5. With regard to claims 4 and 5, VanDenberg discloses the vehicle suspension assembly 1 described above wherein the first end 35 of the first control arm 14 is adapted to be pivotally coupled with a first linkage member 5 that is fixedly attached to and extends downwardly from the first frame member 16, the first end of the second

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control arm is adapted to be pivotally coupled with a second linkage member, identical to the first, that is fixedly attached to and extends downwardly from the second frame member.

6. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over VanDenberg in view of Mair (6,409,280). VanDenberg discloses a vehicle suspension assembly comprising three control arms 24,24,22 and a rigid torsion member 60 coupled to the first and second control arms 24,24. VanDenberg discloses the present invention except for the torsional member including a first flanged end and a second flanged end, and the first flanged end being fixedly coupled to the first control arm via at least one bolt extending through at least one aperture in the first flanged end and at least one aperture in the first control arm, and the second flanged end being fixedly coupled to the second control arm via at least one bolt extending through at least one aperture in the second flanged end and at least one aperture in the second control arm. Mair teaches truck and trailer hub comprising an axle with a flanged end flanged end 20 that is fixedly coupled to a wheel assembly via a plurality of bolts 21 extending through corresponding apertures in the flange and wheel assembly. This is a commonly known means of coupling one object to another. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Mair of the flanged tube connection to the two ends of the tube-shaped torsion member to create more secure and rigid attachments of the torsion member to the control arms.

**(10) Response to Argument**

7. Appellant's primary argument regarding the VanDenberg reference (U.S. Patent No. 5,718,445) is that VanDenberg does not disclose the torsional member as being fixedly coupled to the control arm *proximate* the first end of said control arm. While the plain meaning in the dictionary defines the term "proximate" as being "very near", this is still a relative description. Appellant has failed to fully define the relationship of the torsional member with respect to the control arm beyond a vague disclosure of it being coupled "proximate" an end of the control arm. As viewed in the figures of VanDenberg, particularly Fig. 4, the position at which the torsional member is coupled to the control arm may be viewed as being proximate either end of said control arm. Independent claim 2 does not limit the torsional member as being coupled to the control arm at a position closer to one end than the other or as being coupled to the control arm directly adjacent to an end of the control arm. The claim simply states that the torsional member be coupled to the control arm "proximate" an end thereof without giving any structural relation to which proximate may be further defined. For example, in comparison with respect to a more distal part of the vehicle, such as the bumper, the torsional member is deemed to be very near the specified end of the control arm. It is also to be noted that when observing Appellant's own figures as disclosed by the original disclosure, the torsional member is coupled to the control arm in a position very comparable to that as disclosed by the figures of VanDenberg.
8. With regard to claim 8, Appellant has argued that the apertures in place for the bushings of the control arms of VanDenberg '445 are not elongated. Taken at its

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broadest meaning, elongated simply means that a feature of the object in question is extended in a particular direction such that said feature has a length to it. For instance, the apertures of VanDenberg are elongated in the direction of the thickness of the aperture. Again Appellant has failed to further define to what respect the term elongated applies; the claims do not limit the aperture to being elongated from an original circular shape.

9. Appellant has argued that the combination of the VanDenberg '445 reference with Mair, U.S. Patent No. 6,409,280, is improper due to Mair being non-analogous art. Mair was used to show that it is known in the vehicle art to fasten a tubular member to another member in a vehicle system using a flange on the end of the tubular member and bolts to fasten it in place. The reference was used as an example of obviousness of substituting one fastening means for another. Though the tubular member in Mair may not be used as a torsional member in a suspension system, Mair teaches the use of such a fastening means as being known to designers of vehicular parts. One of ordinary skill in the art would be well aware of many means of fastening particular members in a vehicle sub-system and would have found the means disclosed by Mair as being accessible in that it allows for the tubular member to both be tightly fit to its counterpart while being readily removable.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.



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Respectfully submitted,

/Timothy D Wilhelm/

Examiner, Art Unit 3616

/Paul N. Dickson/

Supervisory Patent Examiner, Art Unit 3616

Conferees:

/pd/

/tw/

/MJ/ Marc Jimenez